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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,592	03/21/2001	Daniel J. Lubera	0275M-000320/CPA	3509

27572 7590 11/29/2002

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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 11/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,592

Applicant(s)

LUBERA ET AL.

Examiner

Ruth C. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 9-14, 18, 19 and 22-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-14, 18, 19 and 22 is/are allowed.
- 6) ☒ Claim(s) 2-6 and 23-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Based upon the Information Disclosure Statement submitted on 08 November 2002, the finality of the rejection of the last Office action is withdrawn.
2. The indicated allowability of claims 38-40 is withdrawn in view of the newly discovered reference(s) to Murray (US 4,300,865). Rejections based on the newly cited reference(s) follow.

Claim Objections

3. Claim 57 is objected to because of the following informalities: Line 3, "tips" should be replaced with --tip--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 38-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 recites the limitation "the first structure" between the second and third lines. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 2-5, 57 and 58 rejected under 35 U.S.C. 102(b) as being anticipated by Murray (US 4,300,865).

A resilient clip (10) secures a first member (P) to a second member (W) (Fig. 1). The resilient clip comprising a flange portion (12), an inserting portion (16) and a retaining portion (22). The flange portion has an aperture (13) to receive a threaded fastener (S) to couple the second member to the flange portion (Fig. 1). The insertion portion is configured to be inserted into a hole (O) formed into the first member (Fig. 1). The inserting portion is coupled to the flange portion (Figs. 1-5). The retaining portion is coupled to the insertion portion and has first and second wing members (22). The first wing member is twisted about a first axis in a first direction (Figs. 2 and 3). The second wing member is twisted about a second axis in the first direction (Figs. 2 and 3). Each of the first and second wing members have a tip portion (22c). The tip portion of the first wing member and the tip portion of the second wing member are configured to co-engage with the first member (Fig. 1). Each of the first and second axes are generally parallel a longitudinal axis of retention (C. 2, L. 49-51 and Figs. 2 and 3). Each of the tip portions is angled such that a lateral end of an associated one of the first and second

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wing members extends above an opposite lateral end of the associated one of the first and second wing members (Figs. 2 and 4).

Murray also discloses that:

- The tip portion is defined by an included angle of about 30 degrees to about 80 degrees (Figs. 2 and 4).
- The included angle of the tip portion is about 60 degrees (Figs. 2 and 4).
- The tip portion has a flat edge for contacting the first member (Figs. 2-4).
- Each of the first and second wing members further include a base portion (16a) that is fixedly coupled to the insertion portion (Figs. 2-5). The first and second wing members being twisted such that the their tip portions are twisted relative to their base portion by an angle of about 5 degrees to about 45 degrees (Figs. 2-5).
- The angle could be about 30 degrees. A change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 6, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray in view of Anderson (US 5,251,467).

Murray discloses a resilient clip having the limitations listed above in paragraph 4 for the rejection of claims 2-5. Murray fails to disclose that the tip portion has an edge

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for contacting the first member into which a plurality of teeth are formed. However, Anderson teaches a cam lock comprising a pair of wing members (25). The wing members initially are shown have an edge with a flat surface for contacting a structure (5,6) (Figs. 5 and 6). Anderson also teaches that the wing members have an edge with a plurality of teeth (Fig. 7). The teeth will lock the edges of the wing members against the structure and allow for variations in thickness of the structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by Anderson in the resilient clip disclosed by Murray. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

Murray discloses a resilient clip (10) for engaging a structure (P) comprises a body portion (16,22) for insertion downwardly into a hole (O) formed in the structure. The body portion includes a plurality of wing members (22) where each of the wing members terminates at a tapered tip portion (Figs. 2-4). Each of the tip portions are twisted about an axis such that an inwardly twisted end of the tip portion is positioned above an outwardly twisted end of the tip portion (Figs. 2-4). Murray fails to disclose the plurality of teeth for engaging a surface of the structure. However as mentioned above, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth for engaging a surface of the structure in each of the wing members as shown by Anderson in the resilient clip disclosed by

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Murray. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

Murray also discloses a flange portion (12) coupled to the body portion. The flange portion includes an aperture (13) having a helical edge adapted to threadably engage a threaded fastener (S).

10. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray/Anderson as applied to claim 39 above, and further in view of Hansz (US 6,179,366 B1) and Ueno (US 5,704,753).

The combination of Murray and Anderson has all the limitations listed above in paragraph 8 for the rejection of claim 39 and fails to disclose a spacing structure having first and second flange members. However, Hansz demonstrates a mounting clip assembly (10) for securing a first member (26) to a second member (12). The clip assembly comprises a resilient clip (58) and a spacing structure (48). The spacing structure has a first flange coupled (52) to the flange portion of the resilient clip. The mounting clip assembly demonstrated by Hansz improves quality because it reduces loose assemblies and is easier to install (C. 2, L. 1-4). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use the a spacing structure as demonstrated by Hansz with the resilient clip disclosed by Murray and modified by Anderson. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

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Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno shows a connector device for securing a first member (P1) to a second member (P2) (Figs. 9-10(B)). The connector comprises a main body (3) having two flange members (1, 11) coupled to the outer edge of the main body and tapering downwardly toward the retaining portion (8a) and outwardly from the main body (Figs. 2-4 and 6). The flange members can elastically deform to prevent wobbling between the connector and the first or second members (C.6, L. 24-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second flange member as shown by Ueno coupled to an outer edge of the flange member demonstrated by Hansz. Doing so, will prevent wobbling between the resilient clip and the first structure.

11. Claims 23, 24, 26, 28-30, 32, 34-36, 41, 42, 44-46, 48, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (US 5,919,019) in view of Murray.

Fischer discloses a resilient clip (10) for engaging a structure (14) (Fig. 5). The resilient clip comprising a body portion having a pair of flanges (12), a pair of wing members (44,46) and a pair of abutting members (48). Each of the wing members has a base portion coupled to an associated one of the pair of flanges (Figs. 1, 2 and 4). Each of the wing members terminates at a tip portion (50). The tip portions of the wing members are configured to co-engage a first side of the structure and position a second side of the structure against the abutting members. Fischer fails to disclose that the wing members are angled downward toward the base. However as mentioned above,

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Murray teaches a resilient clip comprising wing members angled downward toward the base portion (Figs. 2-4). The construction of the wing members allows easy insertion of the clip and the extraction of the clip is very difficult once the clip is inserted into an opening of the structure (C. 3, L. 16-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members angled downward toward the base portion as taught by Murray in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will difficult the extraction of the clip from the structure.

The resilient clip disclosed by Fischer further comprises a flange portion (12) coupled to the body portion. The flange portion including an aperture (16) adapted to threadably engage a threaded fastener. Fischer fails to disclose that the aperture includes a helical lip. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a helical lip instead of the sleeve disclosed by Fischer. Since the applicant does not provide any particular reason to use the helical lip instead of sleeve, one having ordinary skill in the art will recognize the interchangeable use of helical lips and sleeves to threadably engage a threaded fastener in resilient clips.

Fischer discloses a resilient clip comprising a body portion for insertion downwardly into a hole (18) formed in the structure (Fig. 5). The body portion includes a plurality of wing members (44,46). Fischer fails to disclose that the wing member are twisted about an associated axis and having a ratio of insertion force to pull-out force of about 0.04 to about 0.12. However as described above, Murray teaches resilient clip

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having a plurality of wing members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis such that an inwardly twisted end of the tip portion is positioned below an outwardly twisted end of the tip portion as taught by Murray in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to recognize that the plurality of wing members cooperating with the structure taught by Dean could provide a resilient clip with a ratio of insertion to pull-out force of about 0.04 to about 0.12. And even if the resilient clip taught by Dean does not comply with this ratio, one with ordinary skill in the art will recognize that the ratio could be achieved by changes the dimensions of the prior art until the desired ratio is obtained.

For the same reasons explained above, the ration of insertion force to pull-out force can be about 0.04 to about 0.10.

Fischer discloses a resilient clip comprising all the features mentioned above. Fischer fails to disclose that the wing members are twisted about an associated axis. However as mentioned above, Murray teaches resilient clip having a plurality of wing members. Each of the plurality of wing members terminating at a generally flat and continuous edge (Figs. 2-4). The flat edge of each tip portion engages the edge of the hole and inhibits relative movement between the resilient clip and the structure in a direction parallel a longitudinal axis of the hole (C. 3, L. 29-32 and Fig. 1). Therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Murray in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will will difficult the extraction of the clip from first member and securely hold a second member against the first member.

Murray teaches that contact between the flat edges and the edges of the hole is capable of centering the clip relative to the longitudinal axis of the hole (Fig. 1).

Fischer discloses a resilient clip (10) for use in securing a first member (28) to a second member (14) (Fig. 5). The resilient clip comprising a flange portion (12), an inserting portion and a retaining portion (44,46,58). The flange portion has an aperture (16) receiving a threaded fastener (26) to couple the second member to the flange portion (Fig. 5). The insertion portion is configured to be inserted into a hole (18) formed into the first member (Fig. 5). The inserting portion is coupled to the flange portion. The retaining portion is coupled to the insertion portion and has at least three wing members (44,46). The wing members terminate at a tip portion and each tip portion is configured to co-engage the first member (Fig. 5). Fischer fails to disclose that the wing member are twisted about an associated axis and terminate in a tip portion adapted to engage the first member.

However as described above, Murray teaches a fastening device comprising a resilient clip having at least three wing members (22) (Figs. 1-5). The wing members are twisted about an associated axis (C. 2, L. 49-51) and terminate at a downwardly angled tip portion that is adapted to engage the first member (Fig. 1-4). Therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Murray in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

The resilient clip disclosed by Fischer has the following:

- The insertion portion is defined by a pair of flanges (36,38) that are spaced apart about a central axis of the resilient clip (Figs. 2 and 4). Each of the flanges having a first portion (between 52 and 54) and a second portion (between 54 and the end of the flange). The first portion is coupled to the flange portion and tapering inwardly toward the central axis (Figs. 2 and 4). The second portion is coupled to an end of the first portion opposite the flange portion and tapering outwardly away from the central axis and upwardly toward the flange (Figs. 2 and 4).
- The insertion portion has a pair of tapered sides that tapers downwardly and inwardly toward the central axis (Figs. 1, 2 and 5)
- The retaining portion includes four wing members (44,46) (Figs. 1, 2, 3 and 5)

Fischer discloses a resilient clip comprising a body portion (30) having a pair of flanges (36,38) and four wing member (44,46) (Figs. 1, 2, 3 and 5). Each of the wing members has a base portion coupled to an associated one of the flanges (Figs. 1, 2 and 4). A first one of the wing members (44) is coupled to one of the flanges (36), a second one

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of the wing members (46) coupled to the first one of the flanges (36), a third one of the wing members (46) coupled to a second one of the flanges (38) and a fourth one of the wing members (44) coupled to a second one of the flanges (38). Fischer fails to disclose that the wing members are twisted about different axis.

However as described above, Murray teaches a fastening device comprising a resilient clip secured to a structure and having four-wing members (22). A first wing members twisted about a first axis in a first direction, a second wing member twisted about a second axis in a second direction opposite the first direction, a third wing member twisted about a third axis in a first direction and a fourth wing member twisted about a fourth axis in a second direction opposite the first direction (Figs. 2-4). Each of the wing members terminates at a tip portion that is angled downward toward the base portion and configured to engage first side of the structure to secure the resilient clip to the structure (Figs. 1 and 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Murray in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

Fischer also discloses that the first and third wings members are located cross-corner from one another.

Murray teaches that a lateral end of each tip portion includes a first lateral end and a second lateral end (26) opposite the first lateral end (Figs. 2-5). The first lateral

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end is nearest a central axis of the body portion and extending vertically above the second lateral end (Figs. 2-5).

12. Claim 25, 33 and 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Murray as applied to claims 23, 28 and 46 respectively above, and further in view of Anderson.

The combination of Fischer and Murray used for the rejection of claims 23, 28 and 46 having all the limitations listed above in paragraph 10 fails to disclose a plurality of teeth for contacting the structure. However as mentioned above, Anderson shows that the wing members have an edge with a plurality of teeth. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by Anderson in the resilient clip disclosed by Fischer and modified by Murray. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

13. Claims 27, 31 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Murray as applied to claims 26 and 30 above, and further in view of Hansz and Ueno.

The combination of Fischer and Murray having all the limitations listed above in paragraph 10 for the rejection of claims 26, 30 and 36 fails to disclose a spacing structure having first and second flange members. However as described above, Hansz demonstrates a mounting clip assembly comprising a spacing structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time

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of applicant's invention to use the a spacing structure as demonstrated by Hansz with the resilient clip disclosed by Postadan and modified by Murray. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno shows a connector device comprising a main body having two flange members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second flange member as shown by Ueno coupled to an outer edge of the flange member demonstrated by Hansz. Doing so, will prevent wobbling between the resilient clip and the first structure.

14. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Murray as applied to claim 42 above, and further in view of Postadan et al. (US 6,095,734).

The combination of Fischer and Murray used for the rejection of claim 42 having all the limitations mentioned above in paragraph 10 fails to disclose a fastener aperture in the first and second portions. However, Postadan demonstrates a resilient clip (100) having a fastener aperture (28) formed into the first and second portions. The aperture also provides clearance for a fastener (22). The hole is provided to simplify the manufacturing process of the clip (C. 4, L. 35-38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a fastener aperture formed in the first and second portions as demonstrated by

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Postadan in the resilient clip disclosed by Fischer and modified by Murray. Doing so, will simplify the manufacturing process of the clip and reduce the amount of material required for the clip.

15. Claims 28, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray

Dean discloses the combination of a resilient clip (10) engaging a structure (P). The resilient clip comprises a body portion (16,22) for insertion downwardly into a hole (O) formed in the structure (Fig. 1). The body portion including a plurality of wing members (22) and each of the wing members has a base portion and terminating at a tip portion that is angled downwardly toward the base (Figs. 2-4). Each of the tip portions being twisted about an axis such that an inwardly twisted end of the tip portion is positioned below an outwardly twisted end of the tip portion (Fig. 2-4). Murray fails to disclose a ratio of insertion force to pull-out force of about 0.04 to about 0.12. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to recognize that the plurality of wing members cooperating with the structure could provide a resilient clip with a ratio of insertion to pull-out force of about 0.04 to about 0.12. And even if the resilient clip does not comply with this ratio, one with ordinary skill in the art will recognize that the ratio could be achieved by changes the dimensions of the prior art until the desired ratio is obtained.

Once again, it would have been obvious to one having ordinary skill in the art at the time the invention of applicant's invention to have a ratio of insertion force to pull-out force of about 0.04 to about 0.10.

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16. Claims 49-53, 55, 56 and 66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisniewski (US 6,141,837) in view of Murray.

Wisniewski discloses a resilient clip (22) for engaging a first structure (24) to a second structure (26). The resilient clip comprises a body portion having a pair of flanges (44,46) and first and second wing members (70,72). Each of the wing members has a base portion coupled to an associated one of the flanges and terminated at a tip portion (Figs. 1-3). Each of the tip portions engages a first side of the first structure to secure the resilient clip to the second structure (Fig. 1). Wisniewski fails to disclose that the wing members are twisted about an axis.

However as described above, Murray teaches a resilient clip for engaging a first structure to a second structure. The resilient clip comprising a pair of flanges (12) and wing members (22). Each of the wing members has a base portion coupled to an associated one of the flanges (Figs. 2-4). A first wing member twisted about a first axis in a first direction and a second wing member twisted about a second axis in the first direction (Fig. 2-4). Each of the wing members terminates at a tip portion that is angled downwardly toward the base portion (Figs. 2-4). The tip portions are configured to engage a first side of a second structure to secure the resilient clip to the second structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Murray in the retaining portion of the resilient clip disclosed by Wisniewski. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

The resilient clip disclosed by Wisniewski also comprises the following:

- An engagement portion having a plurality of teeth (62,64) extending inwardly toward the central axis of the body portion and downwardly toward the base portion of the wing members (Figs. 1-3). The plurality of teeth is configured for engaging the first structure (Fig. 1).
- The body portion is generally U-shaped (Figs. 1-3).
- The teeth are generally triangular in shape (Fig. 2 and 4).

Wisniewski discloses in combination, a resilient clip (22) for coupling a first structure (24) to a second structure (26). The first structure includes a fastening tab (38). The second structure includes a clip aperture (28). The resilient clip includes a body portion and an engagement portion. The body portion includes a pair of flanges and first and second wing members. The engagement portion has a plurality of teeth having all the features disclosed above and configured for engaging the first structure. Wisniewski fails to disclose that the wing members are twisted about an axis. However as described above, Murray teaches a resilient clip comprising wing members having all the features described above. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Murray in the retaining portion of the resilient clip disclosed by Wisniewski. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

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Murray teaches that each of the tip portions is twisted about an axis such that the inwardly twisted end of each tip portion is positioned above the outwardly twisted end (26) of each tip portion (Figs. 2-5).

17. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wisniewski/Dean as applied to claim 53 above, and further in view of DeWitt (US 5,367,751).

The combination of Wisniewski and Murray used for the rejection of claim 53 having all the limitations mentioned above fails to disclose the fastening tab includes a pair of abutting flanges to inhibit the resilient clip from sliding laterally relative to the fastening tab. However, DeWitt demonstrates in combination, a resilient clip (30) for coupling a first structure (10) to a second structure (12). The first structure includes a fastening tab (16). The fastening tab includes a pair of abutting flanges (18) to inhibit the resilient clip from sliding laterally relative to the fastening tab (Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a fastening tab including a pair of abutting flanges as demonstrated by DeWitt in combination with the resilient clip disclose by Wisniewski and modified by Murray. Doing so, will prevent the movement of the resilient clip relative to the fastening tab.

18. Claims 59-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Murray as applied to claims 26 and 30 above, and further in view of Hansz and Ueno.

The combination of Fischer and Murray having all the limitations listed above in paragraph 6 for the rejection of claim 2 fails to disclose a spacing structure having first and second flange members. However as described above, Hansz demonstrates a mounting clip assembly comprising a spacing structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use the a spacing structure as demonstrated by Hansz with the resilient clip disclosed by Postadan and modified by Murray. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno shows a connector device comprising a main body having two flange members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second flange member as shown by Ueno coupled to an outer edge of the flange member demonstrated by Hansz. Doing so, will prevent wobbling between the resilient clip and the first structure.

Both Hansz (C. 3, L. 23-25) and Ueno (C. 2, L. 12-27) disclose that the spacing structure is formed from a resilient material and that resilient material is plastic

Hansz discloses that the first flange member has a square shape. But, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a circular shape instead of a square shape because a change in shape of the prior art is considered a design choice. Also, one of ordinary skill in the art will

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recognize that the first flange member having a circular shape will perform equally as a flange member having a square shape specially since the applicant does not disclose and advantage derived from this shape.

Ueno shows a second flange member that extends entirely around a perimeter of the main body.

Allowable Subject Matter

19. Claims 9-14, 18, 19 and 22 are allowed.

Response to Arguments

20. Applicant's arguments with respect to claims 2-6 and 23-56 have been considered but are moot in view of the new ground(s) of rejection since Murray discloses twisted wing member having tapered edges.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wiley (US 2,217,781), Poutpitch (US 2,509,192), Meyer (US 2,959,259), Osterland et al. (US 4,630,338), Kuffel (US 5,759,004), Cornell et al. (US 5,774,949) and Danby et al. (US 5,873,690) are cited to show state of the art with respect to resilient clips having some of the features disclosed by the current invention.

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Hirohata (US 4,668,145) is cited to show state of the art with respect to a flange extending around the periphery of the main body of a fastener.

Van Order et al. (US 5,636,891) is cited to show state of the art with respect to the use of spacing structures and resilient clips.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (703) 308-1881. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115.

Submissions of your responses by facsimile transmission are encouraged. Technology center 3600's facsimile number for before final communications is (703) 872-9326. Technology center 3600's facsimile number for after final communications is (703) 872-9327.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr

November 27, 2002

J. J. Swann

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